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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,770	11/21/2001	Melody Vos	149-0046US	1825

29855 7590 08/09/2007

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EXAMINER	
ABEL JALIL, NEVEEN	
ART UNIT	**PAPER NUMBER**
2165	

MAIL DATE	DELIVERY MODE
08/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/990,770	VOS ET AL.	
	Examiner	Art Unit	
	Neveen Abel-Jalil	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,8-10,12-19,21,23-25,27-34,36,38-40 and 42-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. The response filed on May 22, 2007 has been received and entered. Claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1- 4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 are rejected under 35 U.S.C. 102(a) as being anticipated by Fangzhe Chang & Vijay Karamcheti. Automatic Configuration and Run-Time Adaptation of Distributed Applications. IEEE 2000. (hereon in Chang et al.)

As to claims 1, 16, and 31, Chang et al. discloses

associating management criteria with the database to manage database objects (See page 13, paragraphs 3-6);

collection statistics relating to the operation of the database (See page 14, wherein "QoS metrics" are statistics, also see page 15, paragraph 2); and

determining characteristics of the database objects based on the collected statistics (See page 16, paragraph 4, also see page 17, paragraphs 1-3);

determining actions to be performed on one or more database to modify the one or more database objects based on the management criteria and the determined characteristics of the database objects (See page 12, paragraph 1);

modifying the one or more database objects by performing the actions on the database objects (See page 12, paragraph 3);

monitoring results of modifying the database objects (See page 12, paragraph 2); and

reconfiguring the management criteria associated with the database based on the results of modifying the database objects (See page 11, abstract, also see page 12, paragraph 8).

As to claims 2, 17, and 32, Chang et al. discloses automatically determining a schedule to perform the actions on the database objects, wherein the performing the actions on the database objects comprises performing the actions on the database objects based on the schedule (See page 13, paragraph 10).

As to claims 3, 18, and 33, Chang et al. discloses wherein the performing the actions on the database objects based on the schedule comprises automatically performing the actions on the database objects based on the schedule (See page 13, paragraph 10).

As to claims 4, 19, and 34, Chang et al. discloses confirming the performing the actions on the database objects (See page 14, paragraph 2, wherein "performing an action" reads on "adaptation" taking place or moving to next execution).

As to claims 6, 21, and 36, Chang et al. discloses wherein the determining the characteristics of the database objects comprises automatically determining the characteristics of the database objects (See page 13, paragraph 4, also see page 13, paragraph 10).

As to claims 8, 23, and 38, Chang et al. discloses wherein the determining the actions to be performed on the database objects based on the characteristics of the database objects comprises automatically determining the actions to be performed on the database objects based on the characteristics of the database objects (See page 17, paragraphs 3-4).

As to claims 9, 24, and 39, Chang et al. discloses wherein the statistics comprise object-level statistics (See page 14, paragraph 1).

As to claims 10, 25, and 40, Chang et al. discloses wherein the statistics comprise activity-level statistics (See page 14, paragraph 1).

As to claims 12, 27, and 42, Chang et al. discloses wherein the determining the characteristics of the database objects comprises determining the characteristics of the database objects using one or more policies in the management criteria (See page 14, paragraph 5, also see page 17, paragraph 3).

As to claims 13, 28, and 43, Chang et al. discloses wherein the determining the characteristics of the database objects comprises determining the characteristics of the database

objects using one or more definitions in the management criteria (See page 16, paragraph 4).

As to claims 14, 29, and 44, Chang et al. discloses customizing the one or more definitions in the management criteria (See page 17, section 5.2. wherein "customizing" reads on "interest to the user").

As to claims 15, 30, and 45, Chang et al. discloses customizing the one or more policies in the management criteria (See page 12, paragraph 1, also see page 13, paragraphs 4-6).

Response to Arguments

4. Applicant's arguments filed on May 22, 2007 have been fully considered but they are not persuasive.

In response to Applicant's argument that "Chang et al. is directed to automatic configuration and run-time adaptation of a distributed application and not directed to automated management of a database" is acknowledged but not deemed to be persuasive.

Applicant's disclosure paragraph 0062 suggest the database is also a database management system which is inherently an application running on a computing device. The paragraph also suggests that the statistics are calculated based application resources utilization and gathering application performance information. Furthermore, The Examiner is broadly interpreting the recitation of "server" application storing large images in Chang et al. page 12, paragraph 5, be "database" and "the large images" are to "database objects".

There are no specific examples given to what constitutes database objects in Applicant's disclosure, in fact most emphasis is placed on what objectives related to the application are being collected as stated in applicant's disclosure paragraph 0047, describes the database objects to be:

> Objectives may relate to computer system resource usage parameters such as CPU time, "real-world" time, and storage utilization.

And paragraph 0099:

> This component (not shown) may provide a facility for logically grouping database objects together. A definition may include a set of rules which, when applied to the DBMS catalog, results in a list of Database objects. The rules that define the logical grouping of objects may be given a name (e.g., the application name) and stored in the Object Advisor Repository 646. Object Advisor may use Application Definitions to implement policies regarding Utility Automation.

Thus, in fact no different from the performance statistics gathered by Chang et al. page 12, paragraph 7.

Regardless of the application the claimed methodology is directed to, the actual functionally and performance of the process is what's patentable and is what's covered by the teachings of the prior art. The processes sought to be patented are applicable in any application management environment.

Chang et al.'s database server storing images that depending on the resources related to application's availability in connection with clients provide the required image visualization as taught in Chang et al. page 12, paragraphs 5-7.

In response to Applicant's argument that "In Chang et al. there is no disclosure of database objects (or any equivalent entity) or associated management criteria with a database to manage the database objects" is acknowledged but not deemed to be persuasive.

Management criteria according to Applicant's disclosure are related to identified conditions that cause performance or availability problems in data base objects But not in fact claimed as any specific criteria. Therefore, it can be broadly interpreted as any objectives set out to be monitored and maintained such as CPU load for better compression on Chang et al. page 12, paragraph 3. Chang et al. teaches the association between the objectives and physical configuration parameters to be stored in a performance database fro maintenance on page 16, paragraph 4.

In response to Applicant's argument that "Chang et al. does not teach collecting statistics relating to the operations of a database and does not determine the characteristics of a database based on the collected statistics" is acknowledged but not deemed to be persuasive.

In light of the above responses and discussion and as stated on page 11 of Applicant's response that in fact Chan et al. does teach monitoring agent that monitors resources characteristics related to physical configuration and steering agent that accordingly performs the actual configuration on page 16, paragraph 4. Thus, Chang et al. does teach collecting monitoring the resources and collecting performance statistics that are associated with configuration then storing them in a database and reconfiguring the application. Figure 7 shows various statistics being calculated and visually displayed.

In response to Applicant's argument that "Chang et al. does not teach determining actions to be performed on one or more database objects to modify the database objects based on the management criteria and determined characteristics of the database objects...Chang et al.

performs those functionalities in relation to an application and not objects of a database" is acknowledged but not deemed to be persuasive.

In light of the above responses/discussion and applicant's remarks on page 12 of Applicant's response that in fact Chan et al. does teach changing the configuration (i.e. actions) based on the management criteria (i.e. availability, CPU load, etc.).

In response to Applicant's argument that "Chang et al. does not teach monitoring results of modifying the database objects...Chang et al. merely continuously monitor application request for system resources" is acknowledged but not deemed to be persuasive.

By acknowledging on page 12 of the remarks, the fact that Chang et al. continuously monitors and controls the application's requests for system resources, then Chang et al. would include monitoring the results of newly adapted configuration for subsequent change and/or optimization as taught on page 12, paragraphs 2-3.

In response to Applicant's argument that "Chang et al. does not disclose reconfiguring the management criteria associated with the database based on the results of modifying the database objects...Chang et al. merely discloses executing an application under alternate configuration and NOT database" is acknowledged but not deemed to be persuasive.

In light of the above responses/discussion and Chang et al. page 17, paragraphs 1-3 clearly teaches control parameters (i.e. threshold) sought for the monitoring of the resources thus once reached would trigger a reconfiguration of the application's parameters that would continuously be monitored for subsequent improvement.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chapter 5: Oracle Management Packs and Integrated Applications. Published on Oracle's website 2000.

Eberhard et al. (U.S. Patent No. 5,734,884) teaches Database performance estimator.

Briam et al. (U.S. Patent No. 6,775,676) teaches

Osborne et al. (U.S. Patent No. 7,076,481) teaches management of change records in a database.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil
Primary Examiner
August 5, 2007